

## Neutrino spin flip in system of magnetic barriers

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If a neutrino has a non-vanishing magnetic moment its helicity can be flipped when it passes through a region with a magnetic field which has a component perpendicular to the direction of motion of the neutrino.

We have explored the tunneling of a relativistic neutral spin  $1/2$  particle (Dirac neutrino) through a finite number of magnetic barriers (wells). Using transfer matrix technique we have calculated the transmission coefficients and polarization phase change as a function of the incident angle and energy of the particle. For massless relativistic particle reflections occurs only in the case of non-zero incident angle.